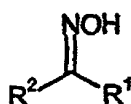




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C22B 3/26, 3/30, 15/00, C01G 3/00, C07C 251/00, 69/68, 69/78		A1	(11) International Publication Number: WO 00/36167
			(43) International Publication Date: 22 June 2000 (22.06.00)
(21) International Application Number: PCT/GB99/03807		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, VZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: 16 November 1999 (16.11.99)		<p>Published With international search report.</p>	
(30) Priority Data: 9827288.3 12 December 1998 (12.12.98) GB			
(71) Applicant (for all designated States except US): AVECIA LIMITED [GB/GB]; Hexagon House, Blackley, Manchester M9 8ZS (GB).			
(72) Inventor; and (75) Inventor/Applicant (for US only): SUGARMAN, Alan, David [GB/GB]; Hexagon House, P.O. Box 42, Blackley, Manchester M9 8ZS (GB).			
(74) Agents: REVELL, Christopher; Avecia Limited, Intellectual Property Group, Hexagon House, P.O. Box 42, Blackley, Manchester M9 8ZS (GB) et al.			

(54) Title: COMPOSITION OF OXIME AND HYDROXY-ESTER FOR THE SOLVENT EXTRACTION OF METALS



(1)



(2)

(57) Abstract

A solvent extraction composition is provided which comprises one or more orthohydroxyaryldoximes or orthohydroxyarylketoimes and one or more esters substituted with a hydroxyl group, and preferably a water immiscible organic solvent. The orthohydroxyaryldoximes, or orthohydroxyarylketoimes commonly have Formula (1), wherein R¹ is hydrogen or a hydrocarbyl group, and R² is an ortho-hydroxyaryl group; and the esters substituted with a hydroxyl group are of Formula (2), wherein one of R⁷ or R⁸ is a substituted hydrocarbyl group with at least one hydroxyl group and the other is an optionally substituted hydrocarbyl group. Preferred orthohydroxyaryldoximes are 5-(C₉ to C₁₄ alkyl)-2-hydroxybenzaldoximes and preferred orthohydroxyarylketoimes are 5-(C₉ to C₁₄ alkyl)-2-hydroxyacetophenone oximes. Preferred esters substituted with a hydroxy group are highly-branched alkyl esters comprising from 5 to 51 carbon atoms, wherein the hydroxy group resides on R⁸. Processes for the extraction of metal values from aqueous acidic and ammoniacal solutions are also provided.